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OKLAHOMA

# '71 WATERSHED REPORT

A milestone year  
No. 1500



U.S. DEPARTMENT OF AGRICULTURE  
Soil Conservation Service  
Stillwater, Oklahoma  
November, 1971

STATUS OF WATERSHEDS IN OKLAHOMA  
July 1971

PL-566

Projects Completed	- - - - -	4
Approved for Operations	- - - - -	47
Approved for Operations (inactive)	- - -	7
Authorized for Planning	- - - - -	11
Applications Pending	- - - - -	<u>43</u>
Total Number of Projects	- - - - -	112
Total Acres	- - - - -	11,887,096

Flood Prevention (Washita River)

Subwatersheds Completed	- - - - -	30
Subwatersheds Planned	- - - - -	25
Subwatersheds Authorized		
for Planning	- - - - -	<u>7</u>
Total Number of Subwatersheds	- - - - -	62
Total Acres	- - - - -	4,940,410

Pilot-Double Creek

Completed	- - - - -	1
Total Acres	- - - - -	30,250

Cherokee Hills RC&D - Hydrologic Units

Completed	- - - - -	2
Planned	- - - - -	<u>3</u>
Total	- - - - -	5
Total Acres	- - - - -	47,270

TOTAL NUMBER OF PROJECTS - - - - - 180

TOTAL ACRES - - - - - 16,905,026

STRUCTURAL MEASURES

	:FLOODWATER RETARDING STRUCTURES:		CHANNEL	
	: Planned	: Completed	: Planned	: Completed
			(miles)	
PL-566	1,348	584	343.67	33.70
Washita	1,127	910	171.10	38.10
Pilot	6	6	-	-
RC&D	11	4	-	-
TOTAL	<u>2,492</u>	<u>1,504</u>	<u>514.77</u>	<u>71.80</u>

# 370476

## FOREWORD

In fiscal year 1971, Oklahoma reached a milestone in the upstream watershed program as the 1500th floodwater retarding structure was contracted April 29th. This accomplishment in the watershed program would not have been reached without the vision and hard work of the many dedicated conservation leaders in Oklahoma.

I also take my hat off to the many loyal hard working Soil Conservation Service employees who played an important role in assisting conservation districts and other watershed sponsors in developing the many successful projects that have been or are being installed.

This 1971 progress report is prepared to keep the agencies and people of Oklahoma informed.

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WATERFALL 30 MARCH 1971

TABLE OF CONTENTS

	<u>PAGES</u>
I. Public Law 566	
Projects Completed - - - - -	1-4
Projects Approved for Operations - - - - -	5-54
Projects Approved for Operations (Inactive) - - -	55-60
Projects Authorized for Planning Assistance - - -	61-66
Applications Approved by the Oklahoma Conservation Commission - - - - -	67-77
II. Flood Prevention - Washita River - - - - -	79-83
III. Watershed Protection and Flood Prevention Progress Map of Oklahoma - - - - -	

PROJECTS COMPLETED  
PL-566



Bear, Fall and Coon Creeks Watershed (Lincoln, Logan and Oklahoma Counties)

Sponsors: Logan County Soil and Water Conservation District  
Lincoln County Soil and Water Conservation District  
Oklahoma County Soil and Water Conservation District  
Bear, Fall and Coon Creeks Water and Soil Conservancy District No. 4

Authorized for Planning: April 15, 1955

Authorized for Operations: June 26, 1958

Completion Date: June 30, 1967

Measures Installed:

1 multipurpose structure with irrigation  
30 floodwater retarding structures

Big Wewoka Creek Watershed (Pottawatomie, Seminole and Hughes Counties)

Sponsors: Shawnee Soil Conservation District  
Seminole County Soil Conservation District  
Hughes County Soil Conservation District  
Wewoka Creek Water and Soil Conservancy District No. 2

Authorized for Planning: February 9, 1955

Authorized for Operations: June 21, 1956

Completion Date: June 30, 1968

Measures Installed:

1 multipurpose structure with wildlife  
41 floodwater retarding structures

Timber Creek Watershed (Beckham and Roger Mills Counties)

Sponsors: North Fork of Red River Soil Conservation District  
Upper Washita Soil Conservation District  
Timber Creek Conservancy District

Authorized for Planning: September 11, 1959

Authorized for Operations: August 31, 1960

Completion Date: June 30, 1968

Measures Installed:

7 floodwater retarding structures

Whitegrass-Waterhole Creek-Watershed (McCurtain County)

Sponsors: Valliant Soil Conservation District  
Little River Soil Conservation District  
Whitegrass-Waterhole Water and Soil Conservancy  
District

Authorized for Planning: April 30, 1957

Authorized for Operations: July 25, 1958

Completion Date: June 30, 1967

Measures Installed:

9 floodwater retarding structures

PROJECTS APPROVED FOR OPERATIONS  
PL-566



Brushy-Peaceable Creeks Watershed (Pittsburg and Latimer Counties)

Sponsors: Pittsburg County Conservation District  
Brushy-Peaceable Creeks Conservancy District  
City of McAlester

Size: 212,912 acres

Authorized for Planning: November 22, 1965

Authorized for Operations: May 28, 1970

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$3,675,304
b. Other	<u>2,228,273</u>
Total	\$5,903,577

Land Treatment:

- Percent of Land Adequately Treated - 55%
- Percent of Planned Measures Applied - 65%

Watershed Problems:

Floodwater and sediment damage to agricultural land

Need for municipal water and recreation for City of McAlester

Project Purposes:

Flood Prevention - Municipal Water - Wildlife Land  
Development

Structural Measures Planned:

2 multipurpose structures with municipal water  
44 floodwater retarding structures

Structural Measures Installed:

None

Easement Status:

5% easements secured

1 site cleared

Acres Flood Plain Protected by Project: 17,276

Effectiveness of Project:

The easement drive was launched October 1970. A watershed tour of two nearly completed watershed projects and a special Rural-Urban Watershed Meeting have resulted in gaining considerable additional support.

Annual benefits to the structures will be: Flood prevention, recreation, more intensive land use, municipal water and redevelopment of rural areas.

Cane Creek Watershed (Muskogee and Okmulgee Counties)

Sponsors: Okmulgee County Conservation District  
Muskogee County Conservation District  
Cane Creek Conservancy District

Size: 101,755 acres

Authorized for Planning: June 6, 1958

Authorized for Operations: September 8, 1961

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,488,996
b. Other	<u>1,673,793</u>
Total	\$3,162,789

Land Treatment:

- Percent of Land Adequately Treated - 70%
- Percent of Planned Measures Applied - 68%

Watershed Problems:

Floodwater and sediment damage to agricultural land  
Flooding of state and federal highways and county roads  
Flood hazards to bridges of roads and railroads

Project Purpose:

Flood Prevention

Structural Measures Planned:

28 floodwater retarding structures

Structural Measures Installed:

18 floodwater retarding structures

Easement Status:

137 of 180 total easements secured

Acres Flood Plain Protected by Project: 7,399

Effectiveness of Project:

Structures built to date have prevented flooding on the main stem of Cane Creek. Runoff from several rains, which would otherwise have caused flooding, has been confined to the channel. Landowners, county commissioners, and others have made many comments about the reduced flooding. No major flood has occurred on the main stem of the creek since the first ten structures were built.

Caney Creek Watershed (Atoka and Bryan Counties)

Sponsors: Atoka County Conservation District  
Bryan County Conservation District  
Lower Clear Boggy Conservancy District

Size: 30,541 acres

Authorized for Planning: September 26, 1960

Authorized for Operations: July 19, 1963

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$586,357
b. Other	<u>370,386</u>
Total	\$956,743

Land Treatment:

- Percent of Land Adequately Treated - 60%
- Percent of Planned Measures Applied - 83%

Watershed Problems:

Frequent and severe flooding

Project Purpose:

Flood Prevention

Structural Measures Planned:

14 floodwater retarding structures

Structural Measures Installed:

11 floodwater retarding structures

Easement Status:

Sites 1 and 12 are cleared for construction

Acres Flood Plain Protected by Project: 2,222

Effectiveness of Project:

Unofficial reports of 4 to 7 inches of rain fell over the watershed in 1967, 1968, 1969 and 1970. No structure flowed through the emergency spillway. All planned structures are complete on the main stream on Caney Creek above the point where Limestone Creek and Caney Creek merge. Only minor flooding occurred on the main stream above this point. Flooding did occur below the junction of the two creeks.

Caney-Coon Creek Watershed (Coal County)

Sponsors: Coal County Conservation District  
City of Coalgate

Size: 23,571 acres

Authorized for Planning: January 28, 1959

Authorized for Operations: September 9, 1959

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$315,743
b. Other	<u>480,615</u>
Total	\$796,358

Land Treatment:

a. Percent of Land Adequately Treated	61%
b. Percent of Planned Measures Applied	65%

Watershed Problems:

Floodwater and sediment damage to agricultural land  
Interruption of travel on State Highways 3 and 31, and  
to the Coalgate Cemetery Road  
Need for municipal water for City of Coalgate

Project Purposes:

Flood Prevention - Municipal Water

Structural Measures Planned:

1 multipurpose structure with municipal water  
2 floodwater retarding structures

Structural Measures Installed:

1 multipurpose structure

Easement Status:

1 site clear for construction  
13 of the 19 easements on the remaining site have been secured

Acres Flood Plain Protected by Project: 765

Effectiveness of Project:

Cannot be measured until completion of remaining two  
structures

Canyon View Watershed (Canadian County)

Sponsors: Central North Canadian River Conservation District

Size: 8,180 acres

Authorized for Planning: April 10, 1967

Authorized for Operations: June 27, 1968

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$283,456
b. Other	<u>154,804</u>
Total	\$438,260

Land Treatment:

a. Percent of Land Adequately Treated - 92%

b. Percent of Planned Measures Applied - 75%

Watershed Problems:

Floodwater and sediment damage to agricultural lands and county roads

Project Purpose:

Flood Prevention

Structural Measures Planned:

4 floodwater retarding structures

1.92 miles channel improvement

Structural Measures Installed:

None

Easement Status:

All land rights or options have been obtained and recorded

Acres Flood Plain Protected by Project: 564

Effectiveness of Project:

The project, when complete, will control the floodwaters in the flood plain area with major benefits being received by both private and public properties. Recreation will be provided in the lakes formed by the structures and the wildlife habitats developed around the structures.

Caston-Mountain Creek Watershed (LeFlore County)

Sponsors: LeFlore County Conservation District  
Caston-Mountain Creeks Conservancy District No. 2  
Town of Wister

Size: 47,853 acres

Authorized for Planning: March 22, 1965

Authorized for Operations: October 12, 1966

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,851,000
b. Other	<u>387,700</u>
Total	\$2,238,700

Land Treatment:

- Percent of Land Adequately Treated - 65%
- Percent of Planned Measures Applied - 76%

Watershed Problems:

Floodwater and sediment damage to agricultural land

Flood protection for Town of Wister

Project Purposes:

Flood Prevention

Structural Measures Planned:

5 floodwater retarding structures

Structural Measures Installed:

Site #1 is under construction

Easement Status:

Sites 1, 2 and 4 - easements obtained for construction

Site 5 has about 70% of needed land acquired by purchase

Site 3 has approximately 40% of land by easement

Acres Flood Plain Protected by Project: 2,668

Effectiveness of Project:

Site #1 is under construction

Cotton-Coon-Mission Creek Watershed (Nowata, Osage and Washington  
Counties, Oklahoma  
Chautauqua County, Kansas)

Sponsors: Conservancy District #26  
Caney Valley Conservation District  
Nowata County Conservation District  
Osage County Conservation District  
City of Dewey  
Town of Wann  
Chautauqua County Soil Conservation District, Kansas

Size: 198,170 acres

Authorized for Planning: November 16, 1964

Authorized for Operations: April 1, 1969

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$2,185,859
b. Other	<u>2,280,269</u>
Total	\$4,466,128

Land Treatment:

- Percent of Land Adequately Treated - 60%
- Percent of Planned Measures Applied - 78%

Watershed Problems:

Floodwater and sediment damage to agricultural land  
Need for Municipal water for Town of Wann and City of Dewey  
Need for water-based recreation development for City of  
Dewey and nearby cities and communities

Project Purposes:

Flood Prevention - Recreation - Municipal Water

Structural Measures Planned:

- 1 multipurpose structure with recreation & municipal water
- 1 multipurpose structure with municipal water
- 13 floodwater retarding structures

Structural Measures Installed:

None

Easement Status:

1 site is cleared for construction, 1 except for pipeline  
15 of 79 total easements have been secured

Acres Flood Plain Protected by Project: 5,392

Effectiveness of Project:

No structures installed at this date

Cottonwood Creek Watershed (Kingfisher, Logan, Canadian and Oklahoma Counties)

Sponsors: Cottonwood Creek Conservancy District #11  
Kingfisher Conservation District  
Logan County Conservation District  
Canadian County Conservation District  
Oklahoma County Conservation District

Size: 242,470 acres

Authorized for Planning: September 26, 1960

Authorized for Operations: October 4, 1962

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$3,761,755
b. Other	<u>1,649,595</u>
Total	\$5,411,350

Land Treatment:

- Percent of Land Adequately Treated - 71%
- Percent of Planned Measures Applied - 81%

Watershed Problems:

Floodwater and sediment damage to agricultural lands, county roads, bridges, and the City of Guthrie

Project Purpose:

Flood Prevention

Structural Measures Planned:

58 floodwater retarding structures

Structural Measures Installed:

12 floodwater retarding structures

Easement Status:

91 of the 234 easements needed have been obtained

4 sites completely cleared

6 sites lack one easement

Acres Flood Plain Protected by Project: 16,000

Effectiveness of Project:

Although no severe flooding rains have occurred on the watershed since 1965, rain did occur during the past year which caused flooding on Deer Creek and Chisholm Creek. No flooding occurred on Cottonwood above Deer Creek. It was evident that this protection was due to the five floodwater retarding structures on the headwaters of Cottonwood Creek. Some sites are being developed into excellent recreation facilities to meet this increasing demand. Two sites furnish irrigation water.

The Work Plan is being revised to reduce sites on the headwaters that are involved in urban development. The City of Bethany has asked to be included as co-sponsor on one site as a source of municipal water.

Deep Red Run-Coffin Creek Watershed (Tillman, Kiowa and Comanche Counties)

Sponsors: Tillman County Conservation District  
Kiowa County Conservation District  
Comanche County Conservation District  
City of Frederick

Size: 58,600 acres

Authorized for Planning: December 9, 1969

Authorized for Operations: June 29, 1971

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,388,563
b. Other	<u>1,687,894</u>
Total	\$3,076,457

Land Treatment:

Percent of Land Adequately Treated 75%

Watershed Problems:

Need for municipal water and recreation for City of Frederick; Floodwater and sediment damage to agricultural land

Project Purposes:

Watershed Protection, flood prevention, recreation and municipal water supply for City of Frederick

Structural Measures Planned:

1 multipurpose structure with municipal water and recreation

1 multipurpose structure with municipal water

Structural Measures Installed:

None

Easement Status:

City of Frederick has voted bonds to purchase land rights for the two multipurpose structures

Acres of Flood Plain Protected by Project: 573

Effectiveness of Project:

No structures have been installed to date

Delaware Creek Watershed (Coal, Atoka, Johnston and Pontotoc Counties)

Sponsors: Atoka County Conservation District  
Coal County Conservation District  
Johnston County Conservation District  
Pontotoc County Conservation District  
Lower Clear Boggy Conservancy District

Size: 50,016 acres

Authorized for Planning: September 26, 1960

Authorized for Operations: October 4, 1962

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,415,975
b. Other	322,745
Total	\$1,738,720

Land Treatment:

- Percent of Land Adequately Treated - 60%
- Percent of Planned Measures Applied - 85%

Watershed Problems:

Frequent and severe flooding

Project Purpose:

Flood Prevention

Structural Measures Planned:

14 floodwater retarding structures

Structural Measures Installed:

9 floodwater retarding structures; 3 are under construction

Basement Status:

Site 14B cleared for construction

Acres Flood Plain Protected by Project: 7,208

Effectiveness of Project:

Unofficial reports of 5 to 9 inches of rain occurred on the watershed in the spring of 1967, 1968, 1969 and 1970. There was major flooding on the main stream below Sandy and Walnut Creeks. None of the structures flowed through the emergency spillways. The structures have been effective on the upper end of the creek where all planned structures are in place. Site 9 is partially located on Camp Simpson, a Boy Scout Camp. Facilities for all waterfront scouting activities have been developed. These facilities include canoeing, boating, swimming, life saving and fishing. Available information indicated that in 1970 there were 5,875 recreation days of use by scouts at this site.

Dumpling-Beaver Creeks Watershed (Pushmataha and Choctaw Counties)

Sponsors: Pushmataha Conservation District  
Kiamichi Conservation District  
Dumpling-Beaver Creeks Conservancy District  
Town of Antlers

Size: 39,674 acres

Authorized for Planning: June 29, 1964

Authorized for Operations: April 1, 1969

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$981,598
b. Other	<u>559,177</u>
Total	\$1,540,775

Land Treatment:

- a. Percent of Land Adequately Treated - 73%
- b. Percent of Planned Measures Applied - 87%

Watershed Problems:

Floodwater and sediment damage to agricultural land

Erosion

County roads and bridges

Need for municipal water and recreation for Town of  
Antlers and surrounding rural water districts

Project Purposes:

Flood Prevention - Recreation - Municipal Water -  
Rural Water

Structural Measures Planned:

9 floodwater retarding structures

1 multipurpose structure with recreation, municipal water  
and rural water

8.49 miles channel improvement

Structural Measures Installed:

None

Easement Status:

15 of 97 easements have been secured

1 channel easement and 9 impoundment structure easements  
are needed to clear Sites 8 and 9, and Channels 1 and 2

Acres Flood Plain Protected by Project: 2,893

Effectiveness of Project:

No structures have been built as of this date

Fitzgerald and Soldier Creeks Watershed (Logan County)

Sponsors: Logan County Conservation District  
Fitzgerald-Soldier Creek Conservancy District  
Joint Board of Administration for the Board  
of Regents for Oklahoma A&M College  
Langston Public Works Authority  
Coyle Public Works Authority

Size: 19,776 acres

Authorized for Planning: November 22, 1965

Authorized for Operations: April 1, 1969

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$688,904
b. Other	<u>114,681</u>
Total	\$803,585

Land Treatment:

- Percent of Land Adequately Treated - 88%
- Percent of Planned Measures Applied - 77%

Watershed Problems:

Protection from sediment and scour damage to 1672 acres of agricultural lands, damage to farm properties, roads, bridges and reduction of flooding in the town of Coyle.

Project Purposes:

Flood Prevention - Municipal Water

Structural Measures Planned:

- 1 multipurpose structure with municipal water
- 4 floodwater retarding structures

Structural Measures Installed:

None

Easement Status:

- 15 of the 19 needed land easements are recorded
- 4 of 5 utility permits obtained

Acres Flood Plain Protected by Project: 1869

Effectiveness of Project:

When installed, this project will prevent flood to the bottomland and the town of Coyle, and furnish municipal water for the City of Langston and Langston University.

The multipurpose site has been contracted from other financial sources by the City of Langston and Langston University.

Four Mile Creek Watershed (Canadian County)

Sponsors: East Canadian County Conservation District  
Central North Canadian River Conservation District  
City of El Reno

Size: 15,360 acres

Authorized for Planning: August 9, 1963

Authorized for Operations: September 25, 1964

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$ 753,738
b. Other	<u>385,341</u>
Total	\$1,139,079

Land Treatment:

- a. Percent of Land Adequately Treated - 90%
- b. Percent of Planned Measures Applied - 85%

Watershed Problems:

Floodwater and sediment damage to agricultural lands,  
county roads, and the City of El Reno

Project Purposes:

Flood Prevention - Recreation

Structural Measures Planned:

1 multipurpose structure with recreation  
4.8 miles channel improvement

Structural Measures Installed:

1 multipurpose structure  
Channel No. 1 completed

Easement Status:

Land easements and rights-of-way acquired - Channel No. 2

Acres Flood Plain Protected by Project: 3,053

Effectiveness of Project:

A large flooding rain occurred in June 1970 after the completion of Channel No. 1, and no flooding was experienced along this channel. The multipurpose structure with recreation features provides excellent recreation facilities for the people of El Reno and surrounding area.

Fourche Maline Creek Watershed (Latimer and LeFlore Counties)

Sponsors: Latimer County Conservation District  
LeFlore County Conservation District  
City of Wilburton  
Wilburton Public Works Authority  
Fourche Maline Creek Conservancy District #10  
Oklahoma Industrial Development & Park Department  
Oklahoma Department of Wildlife Conservation

Size: 195,360 acres

Authorized for Planning: August 26, 1958

Authorized for Operations: August 29, 1960

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$4,410,636
b. Other	<u>1,637,447</u>
Total	\$6,048,083

Land Treatment:

- Percent of Land Adequately Treated - 57%
- Percent of Planned Measures Applied - 69%

Watershed Problems:

Floodwater and sediment damage to agricultural land.  
Need for municipal water for Wilburton and Latimer County  
Rural Water District that services Latimer County rural area  
Recreation and wildlife water for 2 structures in Robbers  
Cave State Park.

Project Purposes:

Flood Prevention - Recreation and Wildlife Water -  
Municipal Water

Structural Measures Planned:

- 1 multipurpose structure with municipal water
- 2 multipurpose structures with recreation-wildlife water
- 11 floodwater retarding structures

Structural Measures Installed:

- 1 multipurpose structure with municipal water
- 2 multipurpose structures with recreation-wildlife water
- 11 floodwater retarding structures

Easement Status:

All easements have been secured

Acres Flood Plain Protected by Project: 14,000

Effectiveness of Project:

All structures are now in place and annual flooding below structures has been materially reduced. Since the last 2 sites have been completed flooding by excessive water has been successfully controlled as planned. Improved pastures are being developed at an accelerated rate. Site 7 has provided City of Wilburton and rural Latimer County with both domestic and industrial water. Congoleum Carpet Factory is now in operation supplying labor for area people and other economic benefits to Wilburton and the surrounding area. Site 11, just completed, will provide recreation for Ozark Trail and Skyline Drive tourists. Sites 3, 4 and 5 are supplying recreational facilities for Robbers Cave State Park. Some 100,000 people within a 50-mile radius are benefited directly or indirectly from the successful operation of the project.

Frogville Creek Watershed (Choctaw County)

Sponsors: Frogville Conservancy District No. 1  
Kiamichi Conservation District

Size: 9,171 acres

Authorized for Planning: January 14, 1963

Authorized for Operations: October 21, 1965

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$424,865
b. Other	<u>362,499</u>
Total	\$787,364

Land Treatment:

- Percent of Land Adequately Treated - 65%
- Percent of Planned Measures Applied - 85%

Watershed Problems:

Frequent flooding of bottomland soils and drainage of inherently wet land

Project Purposes:

Flood Prevention - Drainage

Structural Measures Planned:

2 floodwater retarding structures  
11.94 miles of main channels and laterals

Structural Measures Installed:

2 floodwater retarding structures  
10.35 miles of channels are under construction at the present time, with construction completed on 1.59 miles

Easement Status:

All sites and channels are cleared

Acres Flood Plain Protected by Project: 3,650

Effectiveness of Project:

The completion of the two floodwater retarding structures and channels that have been constructed to date has reduced flooding to a great degree on the bottomland. Since flooding has been greatly reduced, and with the outlets provided by the channels, the farmers have had an opportunity to improve their drainage systems on approximately 1,200 acres, which has virtually eliminated wet spots and drowned-out areas on these acres.

Flooding has not occurred on the state highway or county roads in this area for the past year.

Garrison Creek Watershed (Sequoyah County)

Sponsors: Garrison Creek Conservancy District  
Sequoyah County Conservation District

Size: 21,521 acres

Authorized for Planning: February 15, 1965

Authorized for Operations: April 1, 1969

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$696,233
b. Other	337,334
Total	\$1,033,567

Land Treatment:

a. Percent of Land Adequately Treated	20%
b. Percent of Planned Measures Applied	85%

Watershed Problems:

Floodwater and sediment damage to agricultural land  
Agricultural water management

Project Purposes:

Flood prevention and agricultural water management

Structural Measures Planned:

4 floodwater retarding structures  
19.11 miles of channel improvement

Structural Measures Installed:

None

Easement Status:

Have 13 of the 47 total easements

Acres of Flood Plain Protected: 6,750

Effectiveness of the Project:

The need still exists; however, the enthusiasm diminished  
from planning to approval.

Jack Creek Watershed (Tillman and Comanche Counties)

Sponsors: Tillman County Conservation District  
Comanche County Conservation District  
Jack Creek Conservancy District

Size: 45,709 acres

Authorized for Planning: September 19, 1966

Authorized for Operations: April 1, 1969

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,243,759
b. Other	738,563
Total	\$1,982,322

Land Treatment:

- Percent of Land Adequately Treated - 60%
- Percent of Planned Measures Applied - 75%

Watershed Problems:

Floodwater damage to agricultural land

Project Purposes:

Flood Prevention (Irrigation on Site 3)

Structural Measures Planned:

10 floodwater retarding structures  
1 multipurpose structure  
1 release channel (10.4 miles)

Structural Measures Installed:

None

Easement Status:

6 sites are cleared for construction (2A, 2B, 3, 7, 8, 9)  
90% of the easements secured

Acres Flood Plain Protected by Project: 3,985

Effectiveness of Project:

No structures installed to date

Lambert Creek Watershed (Alfalfa County)

Sponsors: Alfalfa County Conservation District  
Lambert Creek Conservancy District

Size: 7,488 acres

Authorized for Planning: October 5, 1964

Authorized for Operations: November 24, 1965

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$317,574
b. Other	<u>159,360</u>
Total	\$476,934

Land Treatment:

a. Percent of Land Adequately Treated - 64%

b. Percent of Planned Measures Applied - 83%

Watershed Problems:

Floodwater damage, floodplain scour, sediment and erosion damage to agricultural and non-agricultural land

Project Purpose:

Flood Prevention

Structural Measures Planned:

2 floodwater retarding structures

7.3 miles channel improvement

Structural Measures Installed:

2 floodwater retarding structures under construction

Easement Status:

All easements and rights-of-way have been secured

Acres Flood Plain Protected by Project: 583 acres plus

690 acres of benefited area outside the watershed

Effectiveness of Project:

Both floodwater retarding structures have been contracted

Leader-Middle Clear Boggy Creek Watershed (Pontotoc and Coal Counties)

Sponsors: Coal County Conservation District  
Pontotoc County Conservation District  
Upper Clear Boggy Conservancy District #5

Size: 107,968 acres

Authorized for Planning: June 6, 1958

Authorized for Operations: August 29, 1960

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,156,349
b. Other	<u>1,413,584</u>
Total	\$2,569,933

Land Treatment:

- Percent of Land Adequately Treated - 36%
- Percent of Planned Measures Applied - 48%

Watershed Problems:

Floodwater and sediment damage to agricultural lands  
Interruption of travel on State Highways 3 and 31  
Flood damage to county roads and bridges

Project Purpose:

Flood Prevention

Structural Measures Planned:

43 floodwater retarding structures

Structural Measures Installed:

30 floodwater retarding structures

2 floodwater retarding structures under construction

Easement Status:

One additional site is clear for construction

153 of the 241 total easements secured

Acres Flood Plain Protected by Project: 7,172

Effectiveness of Project:

Effectiveness is limited due to only 37% control.

Landowners and operators within the watershed estimate

that the degree of flooding has decreased. Land

improvement in the bottomlands and upland is increasing,  
more fertilizer is being used, and other improvements are  
being made resulting in economic gains for the area.

Little Deep Fork Creek Watershed (Lincoln, Creek and Okmulgee Counties)

Sponsors: Creek County Conservation District  
Lincoln County Conservation District  
Okmulgee County Conservation District  
Little Deep Fork Conservancy District No. 1

Size: 167,488 acres

Authorized for Planning: April 15, 1955

Authorized for Operations: April 3, 1958

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,575,051
b. Other	<u>1,893,144</u>
Total	\$3,468,195

Land Treatment:

- Percent of Land Adequately Treated - 66%
- Percent of Planned Measures Applied - 75%

Watershed Problems:

Floodwater and sediment damage to agricultural land

Project Purposes:

Flood Prevention - Sediment and Pollution Control

Structural Measures Planned:

56 floodwater retarding structures  
5.8 miles channel improvement

Structural Measures Installed:

52 floodwater retarding structures  
5.8 miles channel improvement

Easement Status:

A four-site supplement No. 3 has been approved and all easements secured. Construction of these sites will be done in fiscal year 1972.

Acres Flood Plain Protected by Project: 13,200

Effectiveness of Project:

Bottomland fields are being restored to cultivation and tame pasture. Spring rains of 1969 and 1970 produced only minor flooding along last four miles of the flood plain. No flooding occurred during 1971. Recreation in the form of fishing, skiing, boating, swimming, and picnicking is prevalent on most of the structures.

Little Wewoka - Graves Creek Watershed (Hughes, Seminole and Okfuskee Counties)

Sponsors: Hughes County Conservation District  
Seminole County Conservation District  
Okfuskee County Conservation District  
Wewoka Creek Water & Soil Conservancy  
District No. 2

Size: 122,445 acres

Authorized for Planning: February 9, 1955

Authorized for Operations: June 21, 1956

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$ 934,486
b. Other	<u>1,094,659</u>
Total	\$2,029,145

Land Treatment:

- Percent of Land Adequately Treated - 70%
- Percent of Planned Measures Applied - 70%

Watershed Problems:

Floodwater and sediment damage to agricultural land

Project Purpose:

Flood Prevention

Structural Measures Planned:

18 floodwater retarding structures

Structural Measures Installed:

16 floodwater retarding structures

Easement Status:

Easements and rights-of-way valued at more than \$150,000 have been obtained

Acres Flood Plain Protected by Project: 8,350

Effectiveness of Project:

Irrigation water being obtained from 7 structures. Three heavy rains went through the watershed during the last of May and first part of June 1971, which would have put the creek out of banks if it were not for the flood control structures already in place.

The irrigation of approximately 1000 acres of peanuts from the seven structures had an economic impact of \$240,000 to the Hughes County economic crop year of 1970.

Long Branch Creek Watershed (Payne and Noble Counties)

Sponsors: Noble County Conservation District  
Payne County Conservation District  
Black Bear Conservancy District

Size: 28,160 acres

Authorized for Planning: January 25, 1955

Authorized for Operations: June 21, 1956

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$283,986
b. Other	<u>340,053</u>
Total	\$624,039

Land Treatment:

- Percent of Land Adequately Treated - 78%
- Percent of Planned Measures Applied - 89%

Watershed Problems:

Floodwater and sediment damage to agricultural and non-agricultural land  
Upland and flood plain erosion

Project Purpose:

Flood Prevention

Structural Measures Planned:

11 floodwater retarding structures

Structural Measures Installed:

8 floodwater retarding structures

Easement Status:

No additional sites are cleared for construction and on sites not yet constructed none of the 21 total easements have been secured.

Acres Flood Plain Protected by Project: 2,583

Effectiveness of Project:

No heavy rains have occurred on this watershed which would have caused flooding without the project. The Morr Water District began operations servicing and supplying water for the residents of the Town of Morrison and rural residents a distance of over 26 miles. Two detention sites on Long Branch Creek Watershed presently are being used for this purpose. Recreation and irrigation from structures on this watershed have been very favorable.

This project was reactivated May 1971.

## Lost-Duck Creeks Watershed (Kay County)

Sponsors: Western Kay County Conservation District  
Arkansas River-Kay County Conservation District  
Lost Creek Conservancy District No. 1  
Duck Creek Conservancy District No. 1

Size: 55,040 acres

Authorized for Planning: February 12, 1968

Authorized for Operations: June 18, 1970

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,579,949
b. Other	<u>990,426</u>
Total	\$2,570,375

Land Treatment:

- Percent of Land Adequately Treated - 60%
- Percent of Planned Measures Applied - 65%

Watershed Problems:

Problems include a lack of conservation treatment on the land, inadequate channels, and flood damages to crops, pastures, farm property, railroad property, public roads, culverts and bridges

Project Purposes:

Watershed Protection - Flood Prevention

Structural Measures Planned:

12 floodwater retarding structures  
12.75 (approximately) miles channel improvement

Structural Measures Installed:

None

Easement Status:

No sites are cleared for construction and 12 of 79 total easements have been secured. None of 39 rights-of-way have been secured.

Acres Flood Plain Protected by Project: 9,654

Effectiveness of Project:

Contracting or construction has not started on this project. When installed, this project will reduce sediment yield from the watershed and reduce flood damages on 9,654 acres of flood plain below the structure locations.

Lower Bayou Creek Watershed (Love and Carter Counties)

Sponsors: Love County Conservation District  
Arbuckle Conservation District

Size: 95,488 acres

Authorized for Planning: June 26, 1961

Authorized for Operations: June 17, 1964

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$4,582,377
b. Other	<u>1,250,665</u>
Total	\$5,833,042

Land Treatment:

- Percent of Land Adequately Treated - 52%
- Percent of Planned Measures Applied - 71%

Watershed Problems:

Floodwater and sediment damage to agricultural land  
Drainage of Simon and Walnut Bayou Creek bottomland

Project Purposes:

Flood Prevention and channel enlargement of principal streams

Structural Measures Planned:

19 floodwater retarding structures  
38.17 miles channel improvement

Structural Measures Installed:

2 floodwater retarding structures under construction

Easement Status:

13 sites are cleared for construction  
66 of 232 easements have been secured

Acres Flood Plain Protected by Project: 13,516

Effectiveness of Project:

The land treatment program has affected the amount of runoff from the watershed, but no structures are in place.

Lower Black Bear Creek Watershed (Pawnee, Payne and Noble Counties)

Sponsors: Pawnee County Conservation District  
Payne County Conservation District  
Noble County Conservation District  
Black Bear Conservancy District

Size: 157,683 acres

Authorized for Planning: November 16, 1964

Authorized for Operations: April 1, 1969

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$2,668,286
b. Other	<u>1,299,402</u>
Total	\$3,967,688

Land Treatment

a. Percent of Land Adequately Treated	70%
b. Percent of Planned Measures Applied	53%

Watershed Problems:

Floodwater damage to cropland, roads and bridges, urban area of Pawnee, sediment damage to Keystone Reservoir, sheet erosion, scour damage in flood plain and channel scour

Project Purposes:

Flood Prevention - Reduce Flood Damage in City of Pawnee

Structural Measures Planned:

27 floodwater retarding structures

Structural Measures Installed:

None

Easement Status:

8 sites are cleared for construction and 122 of 227 easements have been secured

Acres in Flood Plain Protected by Project: 11,921

Effectiveness of Project:

Contracting or construction has not started

Lower Clear Boggy Creek Watershed (Atoka, Coal, Bryan and Johnston Counties)

Sponsors: Atoka County Conservation District  
Bryan County Conservation District  
Coal County Conservation District  
Johnston County Conservation District  
Lower Clear Boggy Conservancy District

Size: 240,301 acres

Authorized for Planning: September 26, 1960

Authorized for Operations: March 6, 1964

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$2,487,929
b. Other	<u>2,979,994</u>
Total	\$5,467,923

Land Treatment:

- Percent of Land Adequately Treated - 48%
- Percent of Planned Measures Applied - 78%

Watershed Problems:

Frequent and severe flooding

Project Purpose:

Flood Prevention

Structural Measures Planned:

37 floodwater retarding structures  
2.02 miles channel improvement

Structural Measures Installed:

None

Easement Status:

Approval of the supplement to the Work Plan by the Industrial Development and Park Commission was obtained. The supplement is now in Washington awaiting Congressional approval. No easements were obtained during the year.

Acres Flood Plain Protected by Project: 20,443

Effectiveness of Project:

No structures built to date

Lower Red Rock Creek Watershed (Noble and Pawnee Counties)

Sponsors: Noble County Conservation District  
Pawnee County Conservation District  
Red Rock Conservancy District

Size: 116,582 acres

Authorized for Planning: July 25, 1966

Authorized for Operations: April 1, 1969

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$2,364,944
b. Other	1,417,420
Total	\$3,782,364

Land Treatment:

a. Percent of Land Adequately Treated	63%
b. Percent of Planned Measures Applied	54%

Watershed Problems:

Floodwater damage to agricultural and non-agricultural land. Sediment damage, overbank deposition, erosion damage and flood plain scour.

Project Purposes:

Flood Prevention

Structural Measures Planned:

26 floodwater retarding structures

Structural Measures Installed:

None

Easement Status:

1 site is cleared for construction and 39 of 123 total easements secured.

Acres Flood Plain Protected by Project: 12,815

Effectiveness of Project:

No structures built to date

Okfuskee Tributaries Watershed (Creek, Okfuskee and Okmulgee Counties)

Sponsors: Creek County Conservation District  
Okfuskee Conservation District  
Okmulgee County Conservation District  
City of Okmulgee

Size: 201,575 acres

Authorized for Planning: November 22, 1965

Authorized for Operations: April 1, 1969

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$3,447,990
b. Other	<u>2,643,385</u>
Total	\$6,091,375

Land Treatment:

- Percent of Land Adequately Treated - 56%
- Percent of Planned Measures Applied - 62%

Watershed Problems:

Floodwater, drainage, scour damage and sediment damage to agricultural lands.

Need for municipal water and recreation for Town of Okmulgee.

Project Purposes:

Flood Prevention - Municipal Water - Recreation -  
Irrigation

Structural Measures Planned:

- 1 multipurpose structure with recreation and municipal water
- 1 multipurpose structure with irrigation water
- 33 floodwater retarding structures
- 14 miles channel improvement

Structural Measures Installed:

None

Easement Status:

17 sites are cleared for construction

169 of 250 total easements secured

Acres Flood Plain Protected by Project: 11,301

Effectiveness of Project:

No installations have been made. However, the land treatment program has affected the amount of runoff in the watershed. Installation of the 35 structures and 14 miles of channel improvement are expected to produce annual benefits of \$325,062. Benefits cost ratio is 1.85 to 1. Recreation will be provided in the lakes formed by the structures and some wildlife habitats developed around the sites.

Okmulgee Creek Watershed (Okmulgee County)

Sponsors: Okmulgee County Conservation District  
Okmulgee Creek Conservancy District  
City of Okmulgee  
Okmulgee County Commissioners

Size: 14,490 acres

Authorized for Planning: December 18, 1961

Authorized for Operations: June 17, 1964

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$279,537
b. Other	<u>294,156</u>
Total	\$573,693

Land Treatment:

- Percent of Land Adequately Treated - 70%
- Percent of Planned Measures Applied - 75%

Watershed Problems:

Floodwater, scour and sediment damage on agricultural land and within the City of Okmulgee

Project Purpose:

Flood Prevention

Structural Measures Planned:

2 floodwater retarding structures  
5.7 miles channel improvement

Structural Measures Installed:

2 floodwater retarding structures

Easement Status:

Easements and rights-of-way have been obtained on the lower segment of the channel improvement. 32 of the 124 easements have been acquired on the middle and upper sections.

Acres Flood Plain Protected by Project: 863

Effectiveness of Project:

Major flooding has not occurred since the first structure was built. Rains sufficient to partially test facilities have fallen. Upon completion of the channel improvement, 347 acres of urban area within the City of Okmulgee will be protected from a 100-year frequency rain (flood of record).

Otter Creek Watershed (Kiowa, Tillman and Comanche Counties)

Sponsors: Kiowa County Conservation District  
Tillman County Conservation District  
Comanche County Conservation District

Size: 184,200 acres

Authorized for Planning: January 11, 1965

Authorized for Operations: August 22, 1966

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$ 801,880
b. Other	<u>2,230,045</u>
Total	\$3,031,925

Land Treatment:

- a. Percent of Land Adequately Treated - 60%
- b. Percent of Planned Measures Applied - 70%

Watershed Problems:

Floodwater and sediment damage to agricultural land

Project Purpose:

Flood Prevention

Structural Measures Planned:

7 floodwater retarding structures

Structural Measures Installed:

None

Easement Status:

Sites 2, 3, 4, 5, and 6 cleared for construction

Sites 1 and 7 need 12 easements to clear

Acres Flood Plain Protected by Project: 7,272

Effectiveness of Project:

No structures installed to date

Paint Creek Watershed (Harper County)

Sponsors: Harper County Conservation District  
Town of Laverne

Size: 15,929 acres

Authorized for Planning: July 15, 1968

Authorized for Operations: May 28, 1970

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$258,614
b. Other	<u>93,502</u>
Total	\$352,116

Land Treatment:

- a. Percent of Land Adequately Treated - 74%
- b. Percent of Planned Measures Applied - 53%

Watershed Problems:

Floodwater and sediment damage to agricultural land

Floodwater and sediment damage to Town of Laverne

Need for recreation for Town of Laverne

Project Purpose:

Flood Prevention

Structural Measures Planned:

1 floodwater retarding structure

1.04 miles channel improvement

Structural Measures Installed:

None

Easement Status:

All of easements secured

Acres Flood Plain Protected by Project: 1,478

Effectiveness of Project:

No structures installed to date

Pryor Creek Watershed (Mayes, Rogers and Craig Counties)

Sponsors: Mayes County Conservation District  
Rogers County Conservation District  
Craig County Conservation District  
Pryor Creek Conservancy District

Size: 175,488 acres

Authorized for Planning: December 19, 1966

Authorized for Operations: August 27, 1969

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$2,105,152
b. Other	<u>1,990,290</u>
Total	\$4,095,442

Land Treatment:

- a. Percent of Land Adequately Treated - 55%
- b. Percent of Planned Measures Applied - 70%

Watershed Problems:

Floodwater and sediment damage to agricultural land

Project Purpose:

Flood Prevention

Structural Measures Planned:

36 floodwater retarding structures

Structural Measures Installed:

None

Easement Status:

2 sites are cleared for construction

25 of 196 easements have been secured

Acres Flood Plain Protected by Project: 12,441

Effectiveness of Project:

No structures installed to date

Quapaw Creek Watershed (Lincoln and Pottawatomie Counties)

Sponsors: Lincoln County Conservation District  
Shawnee Conservation District  
Town of Meeker  
Town of Sparks

Size: 98,560 acres

Authorized for Planning: May 20, 1963

Authorized for Operations: September 10, 1965

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$4,232,131
b. Other	<u>1,635,800</u>
Total	\$5,867,931

Land Treatment:

- Percent of Land Adequately Treated - 55%
- Percent of Planned Measures Applied - 70%

Watershed Problems:

Floodwater and sediment damage to agricultural land  
Need for municipal water and recreation for Towns of  
Meeker and Sparks

Project Purposes:

Flood Prevention - Recreation - Municipal Water

Structural Measures Planned:

1 multipurpose structure with recreation and municipal water  
1 multipurpose structure with municipal water  
42 floodwater retarding structures  
8.8 miles channel improvement

Structural Measures Installed:

2 multipurpose structures  
8 floodwater retarding structures

Easement Status:

14 additional sites are cleared for construction, and  
97 of 145 easements needed yet for construction

Acres Flood Plain Protected by Project: 7,208

Effectiveness of Project:

Structures built to date prevented flooding from storm  
of May 6, 1970, which was a 5-inch rain, on East Branch  
of Quapaw Creek.

Rock Creek Watershed (Latimer and LeFlore Counties)

Sponsors: Talihina Conservation District  
City of Talihina

Size: 37,997 acres

Authorized for Planning: April 15, 1963

Authorized for Operations: September 10, 1965

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,224,703
b. Other	<u>513,137</u>
Total	\$1,737,840

Land Treatment:

- Percent of Land Adequately Treated - 62%
- Percent of Planned Measures Applied - 70%

Watershed Problems:

Floodwater and sediment damage to agricultural land  
Residential and business areas in the City of Talihina

Project Purpose:

Flood Prevention

Structural Measures Planned:

3 floodwater retarding structures

Modification of the Talihina municipal water supply structure  
to include floodwater detention storage

Structural Measures Installed:

2 floodwater retarding structures

Modification of the Talihina municipal water supply structure  
to include floodwater detention storage

Easement Status:

Site 4 requires eight easements.

All have been obtained.

Acres Flood Plain Protected by Project: 3,133

Effectiveness of Project:

The three structures in place have reduced flooding but  
to obtain adequate control the project must have Site 4  
installed. Site 1 is open to the public with the land-  
owners' permission and has provided many recreational  
hours of fishing. Site 2 is leased to the Oklahoma  
Wildlife Conservation Department and is open to the public  
for fishing. Site 3 is stocked with catfish, and the  
landowner plans fee fishing. Site 3 also provides abundant  
wildlife habitat and deer may be seen grazing at almost  
any time.

Sallisaw Creek Watershed (Adair and Sequoyah Counties)

Sponsors: Sallisaw Creek Conservancy District  
Sequoyah County Conservation District  
Adair County Conservation District  
Cherokee County Conservation District  
City of Sallisaw  
City of Stilwell  
Stilwell Area Development Authority

Size: 185,280 acres

Authorized for Planning: September 11, 1959

Authorized for Operations: August 28, 1961

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$4,552,584
b. Other	<u>2,379,631</u>
Total	\$6,932,215

Land Treatment:

a. Percent of Land Adequately Treated	47%
b. Percent of Planned Measures Applied	77%

Watershed Problems:

Floodwater and sediment damage to agricultural land  
Sediment deposits in Robert S. Kerr Reservoir and  
Navigation Channel

Need for municipal water for Cities of Sallisaw and Stilwell

Project Purposes:

Flood Prevention - Municipal Water

Structural Measures Planned:

40 Floodwater retarding structures  
2 Multipurpose structures with municipal water

Structural Measures Installed:

31 Floodwater retarding structures  
2 Multipurpose structures with municipal water

Easement Status:

One additional site is cleared for construction and 71 of 119  
remaining easements secured

Acres Flood Plain Protected by Project: 8,146

Effectiveness of Project:

In October 1970 the Sallisaw Creek Watershed received 12 inches  
of rain with approximately four inches falling in a 2-hour  
period of time on saturated soil. The high frequency rain  
produced a flood that inundated approximately 5,000 acres of  
Sallisaw Creek flood plain. It is estimated that approximately  
\$16,800 damage occurred from this flood. The estimated damages  
that would have occurred from this storm without the project  
are \$91,740. When the project is completed, the damages from a  
storm of this size will be reduced to approximately \$8,600, and  
only flood on approximately 3,000 acres of land. This will be  
a reduction in damages of more than 81%.

Salt Creek Watershed (Seminole and Pottawatomie Counties)

Sponsors: Salt Creek Conservancy District

Konawa Conservation District

Shawnee Conservation District

Size: 152,000 acres

Authorized for Planning: April 30, 1957

Authorized for Operations: March 9, 1959

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$2,524,180
b. Other	<u>1,336,596</u>
Total	\$3,860,776

Land Treatment:

a. Percent of Land Adequately Treated - 87%

b. Percent of Planned Measures Applied - 85%

Watershed Problems:

Floodwater and sediment damage to agricultural land and county roads and bridges

Project Purpose:

Flood Prevention

Structural Measures Planned:

49 floodwater retarding structures

Structural Measures Installed:

34 floodwater retarding structures

Easement Status:

11 easements of 65 needed, 115 have been granted

Acres Flood Plain Protected by Project: 22,261

Effectiveness of Project:

Heavy rains fell on this watershed after 25 structures were built and filled most of the flood pools, but caused no flooding downstream. Now with 34 structures completed, the farmer downstream will realize even more protection and will pursue land improvement on the protected land.

Salt-Camp Creek Watershed (Lincoln and Creek Counties)

Sponsors: Creek County Conservation District  
Lincoln County Conservation District  
Salt-Camp Conservancy District No. 19  
City of Stroud

Size: 73,030 acres

Authorized for Planning: August 15, 1961

Authorized for Operations: March 6, 1964

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,816,707
b. Other	<u>1,871,832</u>
Total	\$3,688,539

Land Treatment:

- a. Percent of Land Adequately Treated - 51%
- b. Percent of Planned Measures Applied - 57%

Watershed Problems:

Floodwater and sediment damage to agricultural land. Need for municipal water and recreation for City of Stroud. Flood damage in fiscal 1971 estimated at \$80,000. Flooding in September 1970 from a 7-1/2 inch rain covered 90% of the entire flood plain about 3 feet deep for the last 4 miles and covered 60% of the flood plain over the 4-mile span above that. Another rain of 4 to 5 inches in October also covered much of the lower flood plain.

Project Purposes:

Flood Prevention - Recreation - Municipal Water -  
Sediment and Pollution Control

Structural Measures Planned:

1 multipurpose structure with recreation and municipal water  
24 floodwater retarding structures

Structural Measures Installed:

1 multipurpose structure

Easement Status:

184 easements are required on remaining 24 structures  
6 of the easements were secured during FY 1971

Acres Flood Plain Protected by Project: 4,643

Effectiveness of Project:

One multipurpose structure is providing protection. The multipurpose structure in place protected a 2-mile area of flood plain with no flooding. The multipurpose site started providing municipal water to Stroud in June 1971, and two housing projects are planned on the basis of good, adequate water and one manufacturing firm is enlarging operations.

Sandy Creek Watershed (Pontotoc and Garvin Counties)

Sponsors: Pontotoc County Conservation District  
Garvin Conservation District  
Sandy Creek Water and Soil Conservancy District

Size: 147,243 acres

Authorized for Planning: April 15, 1955

Authorized for Operations: August 26, 1957

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,549,139
b. Other	<u>1,717,251</u>
Total	\$3,266,390

Land Treatment:

- Percent of Land Adequately Treated - 65%
- Percent of Planned Measures Applied - 70%

Watershed Problems:

Floodwater and sediment damage to agricultural land

Project Purpose:

Flood Prevention

Structural Measures Planned:

33 floodwater retarding structures

Structural Measures Installed:

23 floodwater retarding structures

Easement Status:

2 additional sites are cleared for construction, and  
over 90% of total easements have been secured

Acres Flood Plain Protected by Project: 12,653

Effectiveness of Project:

Detention structures have been effective on tributaries of Sandy. We had a major storm in October 1970. Detention structures were effective in the fall of 1970, where they were designed on a 100-year frequency, but those structures designed for a 90-year frequency discharged and most of the flood plain was under water from 2 feet to a 5-foot depth. The rain which fell was estimated from 12 to 15 inches over a 6-hour period. This is the greatest amount of rain that has ever fallen in this watershed according to a survey made of people who had lived there for 50 years. The general attitude is good concerning the program, and the sponsors and people within the watershed would like to get the project completed. The people know that without the 23 flood control structures in place that this would have been a disastrous flood. We are glad to report that all structures withstood the storm, and there was only minor damage on one spillway. Site 24 has been developed into a major recreation area. There are 42 surface acres in this site.

Squaw Creek Watershed (Comanche County)

Sponsors: City of Lawton

Comanche County Board of Commissioners  
Comanche County Conservation District

Size: 7,940 acres

Authorized for Planning: April 23, 1962

Authorized for Operations: December 10, 1962

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$243,546
b. Other	<u>61,480</u>
Total	\$305,026

Land Treatment:

- Percent of Land Adequately Treated - 75%
- Percent of Planned Measures Applied - 78%

Watershed Problems:

Floodwater and sediment damage to agricultural land,  
roads and bridges

Project Purpose:

Flood Prevention

Structural Measures Planned:

4.8 miles of channel improvement

Structural Measures Installed:

4.8 miles of channel improvement

Easement Status:

All easements have been obtained

Acres Flood Plain Protected by Project: 1,917

Effectiveness of Project:

Flooding has not occurred on land adjacent to the improved  
channel while flooding occurred in the City of Lawton where  
the channel was not improved.

Stillwater Creek Watershed (Payne, Noble and Logan Counties)

Sponsors: Stillwater Creek Conservancy District No. 16  
Payne County Conservation District  
Noble County Conservation District  
Logan County Conservation District  
City of Stillwater

Size: 177,216 acres

Authorized for Planning: September 26, 1960

Authorized for Operations: October 11, 1963

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$2,989,649
b. Other	<u>3,492,844</u>
Total	\$6,482,493

Land Treatment:

- Percent of Land Adequately Treated - 81%
- Percent of Planned Measures Applied - 84%

Watershed Problems:

Floodwater and sediment damage to urban areas,  
agricultural land, flood plain scour and erosion.  
Need for municipal water and recreation for City of  
Stillwater.

Need for water supply and irrigation water supply.

Project Purposes:

Flood Prevention - Municipal Water - Irrigation -  
Recreation

Structural Measures Planned:

47 floodwater retarding structures  
5 multipurpose structures with irrigation water supply  
1 multipurpose structure with municipal water supply  
and recreation  
1 multipurpose structure with municipal water supply  
6.3 miles channel improvement

Structural Measures Installed:

2 multipurpose structures  
18 floodwater retarding structures  
2 floodwater retarding structures under construction

Easement Status:

Two sites are under construction. Two additional sites  
are cleared for construction. Of those sites yet to be  
constructed 48 of 158 total easements secured and 3 of  
54 total rights-of-way secured.

Effectiveness of Project:

Structures built to date prevented flooding in the City  
of Stillwater from storm June 9, 1971 which was approxi-  
mately a 3-inch rain. Multipurpose structure with  
municipal water and recreation facilities construction  
completed.

Tri-County Turkey Creek Watershed (Jackson, Harmon and Greer Counties)

Sponsors: Jackson County Conservation District  
Harmon County Conservation District  
Greer County Conservation District  
Tri-County Turkey Creek Conservancy District

Size: 196,400 acres

Authorized for Planning: March 13, 1961

Authorized for Operations: August 29, 1963

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$2,997,840
b. Other	<u>1,946,007</u>
Total	\$4,943,847

Land Treatment:

- Percent of Land Adequately Treated - 53%
- Percent of Planned Measures Applied - 74%

Watershed Problems:

Floodwater and sediment damage to agricultural land

Project Purposes:

Flood Prevention - Recharge Underground Water Supply  
in Irrigated Areas

Structural Measures Planned:

41 floodwater retarding structures  
13.2 miles of channel improvement

Structural Measures Installed:

25 floodwater retarding structures

Easement Status:

Sites 1A and 6 cleared for construction  
Total easements on impounding structures - 140  
Total still needed - 22

Acres Flood Plain Protected by Project: 12,328

Effectiveness of Project:

All structures are functioning properly. Two sites need vegetation established; vegetation on some other sites making poor growth due to extreme drought in 1970 and 1971. Several sites are stocked with fish and good fishing has been reported. Irrigation wells near sites in Jackson County have been strengthened.

Uncle John Creek Watershed (Canadian and Kingfisher Counties)

Sponsors: East Canadian County Conservation District  
Kingfisher County Conservation District

Size: 99,584 acres

Authorized for Planning: April 13, 1964

Authorized for Operations: July 14, 1965

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,822,313
b. Other	<u>936,706</u>
Total	\$2,759,019

Land Treatment:

- Percent of Land Adequately Treated - 90%
- Percent of Planned Measures Applied - 85%

Watershed Problems:

Floodwater and sediment damage to agricultural lands, county roads, bridges, and City of Kingfisher.

Project Purpose:

Flood Prevention

Structural Measures Planned:

14 floodwater retarding structures

Structural Measures Installed:

6 floodwater retarding structures

Easement Status:

Two sites are cleared for construction, and 51% of the total easements have been secured for the eight sites yet to be constructed.

Acres Flood Plain Protected by Project: 5,344

Effectiveness of Project:

This project, when complete, will provide flood protection to 5,344 acres of highly productive bottomland, as well as many county and state highway bridges and roads. Major benefits will be received by private and public properties in the City of Kingfisher.

Upper Bayou Creek Watershed (Carter and Love Counties)

Sponsors: Arbuckle Conservation District  
Love County Conservation District

Size: 119,680 acres

Authorized for Planning: June 26, 1961

Authorized for Operations: June 17, 1964

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$2,383,169
b. Other	<u>1,499,361</u>
Total	\$3,882,530

Land Treatment:

- Percent of Land Adequately Treated - 57%
- Percent of Planned Measures Applied - 70%

Watershed Problems:

Floodwater and sediment damage, erosion damage, need for municipal and recreation water for the City of Healdton

Project Purposes:

Flood Prevention - Recreation - Municipal Water

Structural Measures Planned:

1 multipurpose structure with recreation and municipal water  
21 floodwater retarding structures

Structural Measures Installed:

None

Easement Status:

59 of a total of 168 easements obtained

Acres Flood Plain Protected by Project: 9,178

Effectiveness of Project:

Project reactivated March 1971

Upper Black Bear Creek Watershed (Noble, Garfield and Pawnee Counties)

Sponsors: Noble County Conservation District  
Garfield County Conservation District  
Pawnee County Conservation District  
Black Bear Conservancy District  
City of Perry

Size: 241,546 acres

Authorized for Planning: June 6, 1958

Authorized for Operations: August 29, 1960

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$2,672,846
b. Other	<u>1,851,709</u>
Total	\$4,524,555

Land Treatment:

- Percent of Land Adequately Treated - 71%
- Percent of Planned Measures Applied - 78%

Watershed Problems:

Sediment and floodwater damages to agricultural lands, county roads and bridges

Need for municipal water for towns of Perry and Lucien

Project Purposes:

Flood Prevention - Municipal Water

Structural Measures Planned:

1 multipurpose structure with municipal water  
75 floodwater retarding structures

Structural Measures Installed:

1 multipurpose structure with municipal water  
50 floodwater retarding structures; 2 under construction

Easement Status:

Two sites are presently under construction. Six additional sites are cleared for construction. Of those sites yet to be constructed 82 of 151 easements have been secured, and 11 of 33 rights-of-way have been secured

Acres Flood Plain Protected by Project: 14,309

Effectiveness of Project:

Multipurpose sites furnish additional water supply for the City of Perry, as well as recreation, and rural water district water supply for the Town of Lucien. In June 1971 an approximate 3-inch rain fell in Garfield County. No damaging floods. After being low, most sites filled to principal spill.

Upper Clear Boggy Watershed (Pontotoc, Coal and Johnston Counties)

Sponsors: Pontotoc County Conservation District  
Coal County Conservation District  
Johnston County Conservation District  
Upper Clear Boggy Conservancy District

Size: 162,240 acres

Authorized for Planning: April 30, 1957

Authorized for Operations: September 2, 1959

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$2,349,482
b. Other	<u>2,216,572</u>
Total	\$4,566,054

Land Treatment:

a. Percent of Land Adequately Treated	74%
b. Percent of Planned Measures Applied	71%

Watershed Problems:

Upper Clear Boggy and its tributaries are subject to severe flooding; has occurred as often as 5 times in some years

Project Purposes:

Flood Prevention

Structural Measures Planned:

54 floodwater retarding structures

Structural Measures Installed:

45 floodwater retarding structures

Easement Status:

Easements and rights-of-way valued at \$171,640 have been obtained from 216 landowners.

Acres of Flood Plain Protected by Project: 12,403

Effectiveness of Project:

There was flooding of Upper Clear Boggy watershed in the fall of 1970 where a major storm occurred during the month of October. The depth of flooding was 1 to 4 feet. This was a storm of 50-year frequency, and a few sites discharged through the spillways. Landowners and sponsors feel that when the project is completed that flooding will be of a minor nature. No structures were damaged due to this storm. Site 34 has been developed into a major recreation area. There are now 40 trailer homes near the site and the fact that this site is open for fishing, boating and swimming has had a great deal to do with the success of the trailer court operation. In addition the owner is using water for his nursery, another source of income. A 9-hole golf course has been developed around site 40, along with a housing project. There has already been \$300,000 of private money spent here and when the housing addition is completed there will be \$2,000,000 of private money expended. Here are two examples of benefits to be derived from sites other than flood control.

Upper Elk Creek Watershed (Beckham, Washita and Kiowa Counties)

Sponsors: North Fork of Red River Conservation District  
Kiowa County Conservation District  
Town of Sentinel  
City of Elk City

Size: 248,340 acres

Authorized for Planning: August 9, 1963

Authorized for Operations: September 10, 1965

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$4,660,291
b. Other	<u>3,100,431</u>
Total	\$7,760,722

Land Treatment:

- Percent of Land Adequately Treated - 65%
- Percent of Planned Measures Applied - 77%

Watershed Problems:

Floodwater and sediment damage to agricultural land  
Need for municipal recreation for the Town of Sentinel  
and the City of Elk City

Project Purposes:

Flood Prevention - Recreation

Structural Measures Planned:

2 multipurpose structures for recreation  
45 floodwater retarding structures  
9.7 miles channel improvement

Structural Measures Installed:

17 floodwater retarding structures  
1 multipurpose structure

Easement Status:

12 additional sites are cleared for construction, and 130  
of 170 easements have been obtained  
8 sites need only one easement each to be cleared  
6 sites need only two easements each to be cleared  
Bonds sold and money on hand for other recreation site  
(Site 2)

Acres of Flood Plain Protected by Project: 25,613

Effectiveness of Project:

Structures 32, 33, 24, 38, 8, 10, 12 and 13 were in place when  
4 inches of rain fell on October 9, 1968, and there was no  
flooding below these sites.

Structures 8, 10, 12, 13, 15, 16, 17, 19, 20, 27, 28, 32, 33,  
34 and 38 were in place when 5 inches of rain fell in a 24-hour  
period May 6, 1969. There was no flooding below these sites  
and flooding on the watershed was greatly reduced.

Upper Red Rock Creek Watershed (Garfield and Noble Counties)

Sponsors: Garfield County Conservation District  
Noble County Conservation District  
Red Rock Conservancy District

Size: 197,376 acres

Authorized for Planning: June 6, 1958

Authorized for Operations: August 17, 1961

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,985,844
b. Other	<u>1,837,455</u>
Total	\$3,823,299

Land Treatment:

a. Percent of Land Adequately Treated	68%
b. Percent of Planned Measures Applied	73%

Watershed Problems:

Sediment and floodwater damage to agricultural and nonagricultural land, and to roads and bridges

Project Purposes:

Flood Prevention

Structural Measures Planned:

56 floodwater retarding structures

Structural Measures Installed:

29 floodwater retarding structures

Easement Status:

Four sites are cleared for construction. On the remaining sites to be constructed 39 of 162 easements have been secured and 4 of 45 rights-of-way have been secured.

Acres Flood Plain Protected by Project: 14,911

Effectiveness of Project:

On April 26, 1971 a storm varying from 1 to 5 inches fell in Garfield County. Several sites were full to forebay area. No emergency spill use, no large amounts of flooding. One storm in Noble County in late April 1971 (up to 9 inches in a 4-day period) caused serious flooding even with the completed structures in place.

Waterfall-Gilford Watershed (McCurtain County)

Sponsors: Little River Conservation District  
Waterfall-Gilford Flood Control and Soil Conservancy  
District

Size: 43,410 acres

Authorized for Planning: March 13, 1961

Authorized for Operations: August 29, 1963

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$1,178,066
b. Other	<u>1,431,292</u>
Total	\$2,609,358

Land Treatment:

- Percent of Land Adequately Treated - 55%
- Percent of Planned Measures Applied - 54%

Watershed Problems:

Floodwater and sediment damage to agricultural land

Erosion damage

Drainage

- Outlets are needed for on-farm open drainage systems  
Excessive runoff delays plant development and delays harvest
- Stagnant lakes and pools provide breeding places for  
mosquitoes and other vector insects

Project Purposes:

Flood Prevention - Drainage - Erosion Control

Structural Measures Planned:

12 floodwater retarding structures  
68 miles of channel improvement

Structural Measures Installed:

6 floodwater retarding structures

Easement Status:

3 additional sites are cleared for construction and  
203 of 217 easements secured. Six easements have  
expired due to lag in construction progress.

Acres Flood Plain Protected by Project: 28,000

Effectiveness of Project:

All structures have performed as planned. No extreme weather  
conditions or flooding have occurred during the period. Existing  
structures have prevented an estimated \$2,000 loss in fence  
damage, roads, etc., this year. Sites 1, 2, 3, 6 and 8 have  
been stocked with fish and are being used for recreational  
purposes. These sites provide approximately 250 man-days  
of fishing per year.

PROJECTS APPROVED FOR OPERATIONS (INACTIVE)  
PL-566



Bixby Conservancy District No. 25 Watershed (Tulsa County)

Sponsors: Arkansas-Verdigris Soil and Water Conservation District

Bixby Conservancy District No. 25

Size: 3,790 acres

Authorized for Planning: August 9, 1963

Authorized for Operations: August 27, 1964

Structural Measures Planned:

8.6 miles channel improvement

Structural Measures Installed:

None

Became Inactive: August 27, 1966

Cache Creek Watershed (LeFlore County)

Sponsors: LeFlore County Soil and Water Conservation District  
Cache Bottom Conservancy District

Size: 12,535 acres

Authorized for Planning: April 25, 1960

Authorized for Operations: January 19, 1961

Structural Measures Planned:

19.6 miles channel improvement

Structural Measures Installed:

None

Became Inactive: June 25, 1963

Haikey Creek Watershed (Tulsa County)

Sponsors: Arkansas-Verdigris Soil Conservation District  
Haikey Creek Conservancy District

Size: 24,872 acres

Authorized for Planning: June 6, 1958

Authorized for Operations: July 31, 1961

Structural Measures Planned:

8 floodwater retarding structures

3.7 miles channel improvement

Structural Measures Installed:

None

Became Inactive: June 25, 1963

Long Branch Creek Watershed (Payne and Noble Counties)

Sponsors: Noble County Soil and Water Conservation District  
Payne County Soil and Water Conservation District  
Black Bear Conservancy District

Size: 28,160 acres

Authorized for Planning: January 25, 1955

Authorized for Operations: June 21, 1956

Structural Measures Planned:

11 floodwater retarding structures

Structural Measures Installed:

8 floodwater retarding structures

Became Inactive: June 25, 1963

Squirrel Creek Watershed (Pottawatomie County)

Sponsors: Squirrel Creek Conservancy District  
Shawnee Soil and Water Conservation District

Size: 16,128 acres

Authorized for Planning: March 12, 1962

Authorized for Operations: September 14, 1964

Estimated Total Cost of Project:

a. Public Law 566 Funds	\$387,878
b. Other	207,410
Total	\$595,288

Land Treatment:

a. Percent of Land Adequately Treated	66%
b. Percent of Planned Measures Applied	60%

Watershed Problems:

Floodwater and sediment damage to agricultural land

Project Purposes:

Watershed Protection - Flood Prevention

Structural Measures Planned:

7 floodwater retarding structures  
3.4 miles channel improvement

Structural Measures Installed:

None

Easement Status:

Due to increasing land values and homesite development in the area, which is in close proximity to Shawnee and Tecumseh, Oklahoma, the local sponsoring organizations have not been able to make much progress toward land acquisition.

Acres Flood Plain Protected by Project: 2,024

Effectiveness of Project:

No structures installed to date.

Became Inactive: September 22, 1970

Upper Blue River Watershed (Atoka, Bryan, Johnston, Murray and Pontotoc Counties)

Sponsors: Pontotoc County Soil and Water Conservation District  
Johnston County Soil and Water Conservation District  
Bryan County Soil and Water Conservation District  
Atoka County Soil and Water Conservation District  
Murray County Soil and Water Conservation District

Size: 203,100 acres

Authorized for Planning: April 25, 1960

Authorized for Operations: October 2, 1962

Structural Measures Planned:

74 floodwater retarding structures

Structural Measures Installed:

None

Became Inactive: September 30, 1968

Wagon Creek Watershed (Alfalfa and Grant Counties)

Sponsors: Wagon Creek Conservancy District  
Alfalfa County Soil and Water Conservation District  
Grant County Soil and Water Conservation District

Size: 36,900

Authorized for Planning: September 11, 1959

Authorized for Operations: June 8, 1962

Structural Measures Planned:

12 floodwater retarding structures

10.6 miles channel improvement

Structural Measures Installed:

None

Became Inactive: August 27, 1966

**PROJECTS AUTHORIZED FOR PLANNING ASSISTANCE  
PL-566**



Big Beaver Creek Watershed (Cotton, Comanche, Stephens and Grady Counties)

Sponsors: Cotton County Soil and Water Conservation District  
Comanche County Soil and Water Conservation District  
Stephens County Soil and Water Conservation District

Size: 177,000 acres

Authorized for Planning: February 12, 1968

Status: Planning is 65 percent complete

Cow Creek Watershed (Stephens and Jefferson Counties)

Sponsors: Stephens County Soil and Water Conservation District  
Jefferson County Soil and Water Conservation District  
City of Duncan  
Cow Creek Conservancy District

Size: 122,880 acres

Authorized for Planning: July 3, 1967

Status: Tentative draft is being reviewed

Kadashan Bottom Watershed (Wagoner County)

Sponsors: Wagoner County Soil and Water Conservation District  
Kadashan Bottom Conservancy District

Size: 9,326 acres

Authorized for Planning: September 9, 1968

Status: Final draft sent to Washington, D.C.

Kickapoo Nations Watershed (Lincoln and Oklahoma Counties)

Sponsors: Lincoln County Soil and Water Conservation District  
Oklahoma County Soil and Water Conservation District  
Kickapoo Nations Conservancy District  
City of Chandler  
Town of Wellston

Size: 165,300 acres

Authorized for Planning: February 24, 1969

Status: Planning is 73 percent complete

Little Beaver Creek Watershed (Stephens, Grady, Cotton and Comanche Counties)

Sponsors: Stephens County Soil and Water Conservation District  
Grady County Soil and Water Conservation District  
Cotton County Soil and Water Conservation District  
Comanche County Soil and Water Conservation District

Size: 124,800 acres

Authorized for Planning: July 22, 1969

Status: Planning is 25 percent complete

McKinney-Buzzard Creek Watershed (McCurtain County)

Sponsors: Valliant Soil and Water Conservation District  
McKinney-Buzzard Conservancy District

Size: 13,865 acres

Authorized for Planning: September 9, 1968

Status: Planning is 72 percent complete

Norwood Creek Watershed (McCurtain County)

Sponsors: Little River Soil Conservation District

Size: 41,600 acres

Authorized for Planning: November 4, 1968

Status: Planning is 45 percent complete

Pott-Sem-Turkey Creek Watershed (Seminole and Pottawatomie Counties)

Sponsors: Seminole County Soil and Water Conservation District  
Shawnee Soil and Water Conservation District

Size: 34,560 acres

Authorized for Planning: April 7, 1969

Status: Planning is 65 percent complete

Sans Bois Creek Watershed (Haskell, Latimer, and Pittsburg Counties)

Sponsors: Haskell County Soil and Water Conservation District  
Latimer County Soil and Water Conservation District  
Pittsburg County Soil and Water Conservation District

Size: 205,000 acres

Authorized for Planning: July 27, 1970

Status: Planning is 14 percent complete

Upper Little River Watershed (Cleveland County)

Sponsors: Cleveland County Soil and Water Conservation District  
Upper Little River Conservancy District

Size: 77,500 acres

Authorized for Planning: November 22, 1965

Status: Planning suspended because of unresolved water rights question. This watershed is located above constructed Thunderbird Reservoir.

Upper Muddy Boggy Creek Watershed (Pontotoc, Coal, Hughes and  
Pittsburg Counties)

Sponsors: Coal County Soil and Water Conservation District  
Hughes County Soil and Water Conservation District  
Pontotoc County Soil and Water Conservation District  
Pittsburg County Soil and Water Conservation District

Size: 198,000 acres

Authorized for Planning: December 18, 1967

Status: Planning is 96 percent complete

**APPLICATIONS APPROVED BY THE  
OKLAHOMA CONSERVATION COMMISSION  
PL-566**



Atwood-Calvin Tributaries (Hughes County)

Sponsors: Hughes County Soil and Water Conservation District  
Size: 72,000 acres

Birds Nest Creek Watershed (Kay and Noble Counties)

Sponsors: Noble County Soil and Water Conservation District  
Western Kay County Soil and Water Conservation  
District  
Size: 24,500 acres

Bitter Creek Watershed (Kay County)

Sponsors: Western Kay County Soil and Water Conservation  
District  
Size: 63,320 acres (in Oklahoma)

Black Fork Creek Watershed (LeFlore County)

Sponsors: LeFlore County Soil and Water Conservation District  
Size: 50,160 acres (in Oklahoma)

Boiling-Springs Beaver Creek Watershed (Latimer County)

Sponsors: Latimer County Soil and Water Conservation District  
Size: 15,338 acres

Bois D'Arc-CowSkin Creeks Watershed (Kay County)

Sponsors: Western Kay County Soil and Water Conservation  
District  
Arkansas River-Kay County Soil and Water  
Conservation District  
Size: 80,000 acres

Brazil Creek Watershed (Latimer, LeFlore and Haskell Counties)

Sponsors: LeFlore County Soil and Water Conservation District  
Latimer County Soil and Water Conservation District  
Haskell County Soil and Water Conservation District  
Size: 152,100 acres

Buffalo Creek Watershed (Latimer and Pushmataha Counties)

Sponsors: Talihina Soil and Water Conservation District  
Latimer County Soil and Water Conservation District  
Size: 49,000 acres

Campbell Creek Watershed (Kingfisher County)

Sponsors: Kingfisher County Soil and Water Conservation District  
Size: 41,420 acres

Central Little River Watershed (Cleveland, Pottawatomie and Seminole Counties)

Sponsors: Shawnee Soil and Water Conservation District  
Konawa Soil and Water Conservation District  
Cleveland County Soil and Water Conservation District  
Size: 220,168 acres

Coal Creek Watershed (Pittsburg and Hughes Counties)

Sponsors: Hughes County Soil and Water Conservation District  
Pittsburg County Soil and Water Conservation District  
Size: 132,000 acres

Combined Creeks Watershed (LeFlore County)

Sponsors: LeFlore County Soil and Water Conservation District  
Size: 98,048 acres (in Oklahoma)

Coody Creek Watershed (Muskogee County)

Sponsors: Muskogee County Soil and Water Conservation District  
Size: 33,330 acres

Cottonwood Canyon Watershed (Alfalfa County:

Sponsors: Alfalfa County Soil and Water Conservation District  
Size: 36,000 acres

Dirty Creek Watershed (Muskogee and McIntosh Counties)

Sponsors: Muskogee County Soil and Water Conservation District  
Checotah Soil and Water Conservation District  
Size: 215,000 acres

Duck and Snake Creeks Watershed (Okmulgee, Tulsa and Creek Counties)

Sponsors: Okmulgee County Soil and Water Conservation District  
Creek County Soil and Water Conservation District  
Tulsa County Soil and Water Conservation District  
Size: 115,540 acres

Georges Fork Creek Watershed (McIntosh and Muskogee Counties)

Sponsors: Checotah Soil and Water Conservation District  
Muskogee County Soil and Water Conservation District  
Size: 38,920 acres

Holston-Reichert-Conser Creeks Watershed (LeFlore County)

Sponsors: LeFlore County Soil and Water Conservation District  
Size: 97,792 acres

Hominy Creek Watershed (Osage and Tulsa Counties)

Sponsors: Osage County Soil and Water Conservation District  
Tulsa County Soil and Water Conservation District  
Size: 248,636 acres

Houston Creek Watershed (Woods County)

Sponsors: Woods County Soil and Water Conservation District  
Size: 18,000 acres

Hoyle Creek Watershed (Major County)

Sponsors: Major County Soil and Water Conservation District  
Size: 36,768

J. V. Flats (Revised) (Dewey County)

Sponsors: Dewey County Soil and Water Conservation District  
Size: 4,870 acres

Kingfisher Creek Watershed (Kingfisher, Canadian and Blaine Counties)

Sponsors: Kingfisher County Soil and Water Conservation District  
Central North Canadian River Soil and Water  
Conservation District  
Blaine County Soil and Water Conservation District  
East Canadian County Soil and Water Conservation District  
Cimarron Valley Soil and Water Conservation District  
Size: 215,000 acres

Lower Beaver Creek Watershed (Jefferson, Cotton and Stephens Counties)

Sponsors: Jefferson County Soil and Water Conservation District  
Stephens County Soil and Water Conservation District  
Cotton County Soil and Water Conservation District  
Size: 124,900 acres

Lower Big Cabin Creek Watershed (Ottawa, Craig, Mayes and Delaware Counties)

Sponsors: Craig County Soil and Water Conservation District  
Size: 146,944 acres

Lower Bird Creek Watershed (Osage, Tulsa, Rogers and Washington Counties)

Sponsors: Osage County Soil and Water Conservation District  
Tulsa County Soil and Water Conservation District  
Size: 244,050 acres

Lower Blue River Watershed (Bryan, Atoka and Johnston Counties)

Sponsors: Bryan Soil and Water Conservation District  
City of Durant  
Size: 236,032 acres

Lower Caney River Watershed (Osage, Washington, Rogers and Tulsa Counties)

Sponsors: Caney Valley Soil and Water Conservation District  
Rogers County Soil and Water Conservation District  
Osage County Soil and Water Conservation District  
Tulsa County Soil and Water Conservation District  
Oklahoma Conservancy District #26

Size: 152,940 acres

Lower Skeleton Creek Watershed (Logan, Kingfisher and Garfield Counties)

Sponsors: Garfield County Soil and Water Conservation District  
Logan County Soil and Water Conservation District

Size: 154,200 acres

Lukfata Creek Watershed (McCurtain County)

Sponsors: Little River Soil and Water Conservation District  
Size: 34,458 acres

Middle Muddy Boggy Creek Watershed (Coal, Pittsburg and Atoka Counties)

Sponsors: Coal County Soil and Water Conservatinn District  
Atoka County Soil and Water Conservation District  
Pittsburg County Soil and Water Conservation District  
Size: 149,000 acres

Perkins Laterals (Logan, Lincoln and Payne Counties)

Sponsors: Payne County Soil and Water Conservation District  
Lincoln County Soil and Water Conservation District  
Logan County Soil and Water Conservation District  
Size: 61,800 acres

Robinson Creek Watershed (Lincoln County)

Sponsors: Lincoln County Soil and Water Conservation District  
Size: 40,320 acres

Sand Creek Watershed (Major County)

Sponsors: Major County Soil and Water Conservation District  
Size: 35,000 acres

Sand-Hogshooter Creeks Watershed (Nowata, Osage and Washington Counties)

Sponsors: Osage County Soil and Water Conservation District  
Caney Valley Soil and Water Conservation District  
Nowata County Soil and Water Conservation District  
Oklahoma Conservancy District #26  
Size: 242,560 acres

Six Mile Creek Watershed (Canadian County)

Sponsors: Central North Canadian River Soil and Water Conservation District

Size: 20,160 acres

Turkey Creek Watershed (Garfield, Alfalfa, Major and Kingfisher Counties)

Sponsors: Garfield County Soil and Water Conservation District  
Alfalfa County Soil and Water Conservation District  
Major County Soil and Water Conservation District  
Kingfisher County Soil and Water Conservation District

Size: 239,000 acres

Turkey-Boggy Creek Watershed (Woods County)

Sponsors: City of Alva  
Woods County Soil and Water Conservation District  
East Woods County Soil and Water Conservation District

Size: 37,900 acres

Upper Big Cabin Creek Watershed (Craig and Mayes Counties)

Sponsors: Craig County Soil and Water Conservation District

Size: 143,144 acres

Upper Bird Creek Watershed (Osage, Tulsa, Rogers and Washington Counties)

Sponsors: Tulsa County Soil and Water Conservation District  
Osage County Soil and Water Conservation District

Size: 248,790 acres

Upper Skeleton Creek Watershed (Kingfisher, Garfield and Logan Counties)

Sponsors: Kingfisher County Soil and Water Conservation District  
Logan County Soil and Water Conservation District  
Garfield County Soil and Water Conservation District

Size: 247,800 acres

Walnut Bayou Watershed (McCurtain County)

Sponsors: Little River Soil and Water Conservation District  
Size: 42,750 acres

Whiskey Creek Watershed (Cotton and Jefferson Counties)

Sponsors: Cotton County Soil and Water Conservation District  
Jefferson County Soil and Water Conservation District  
Size: 45,240 acres



## **FLOOD PREVENTION - WASHITA RIVER**



## WASHITA RIVER

### The Project in Brief

The Washita River Watershed was authorized under the Flood Control Act of 1944. The problems on the 64 tributaries include floodwater and sediment damages on 265,000 acres of bottomland, and water supply and recreation needs throughout the basin. There are 112,000 acres along the mainstem of the Washita needing protection. Local sponsors of each subwatershed are Conservation Districts, Watershed Associations, and City Councils with overall guidance provided by the Washita Flood Prevention Council. More than 85% of the land is privately owned, and tax-free restricted Indian land amounts to 9%.

### Progress in Land Treatment

Basic plans have been developed on approximately 79% of the privately owned land on the Washita River Watershed, and the Bureau of Indian Affairs has agreements for proper use and treatment of the restricted Indian lands. Emphasis continues on providing basic farm plans for all land within a treated watershed. Good progress has been made in application of land treatment measures which will protect the watershed areas and reduce sediment yields. Approximately 60% of the land is considered "adequately treated".

Irrigation systems continue to be on the increase. Much of the irrigation is from wells; however, a number of floodwater retarding structures are also being used.

### Progress in Obtaining Easements and Rights-of-Way

The District Directors in Reach I and II cleared 10 sites and one critical area during the 1971 Fiscal Year. With these sites being cleared and a number of other easements being obtained on the remaining 55 structures and 4 critical areas, the Directors have cleared 93% of the land rights needed for all planned structures in Reach I and II segments of the Washita.

Little Washita River, Bitter Creek, Maysville Laterals, and Wildhorse Creek watersheds have received the greatest attention as far as easement acquisitions are concerned.

Difficulties beyond normal in obtaining easements have prevented completion of several sites on the following watersheds: Winter, Cherokee Sandy, Kickapoo Sandy, Little Washita, Ionine, Maysville Laterals, Caddo, Washington, Wildhorse and Rock Creeks.

Condemnation suits have been filed on several tracts of land needed for clearance of rights-of-way for construction, but judicious exercise of right of eminent domain by districts necessitates thorough study and restraint.

Finn Creek Site 34, Maysville proposed municipal water site, was cleared for construction during 1971. A Mid-Continent pipeline remained after 5 condemnation suits were filed on land tracts. A compromised sum of money, \$20,000, was agreed upon by Maysville and Mid-Continent Pipeline after much negotiating. Contract was let April 30, 1971, making this the 1500th floodwater retarding structure to be contracted in Oklahoma.

Bitter Creek has progressed as well as any watershed during 1971. Fourteen sites have been cleared for construction, 4 sites have 1 easement remaining, 2 sites must be moved, 1 site is being cleared by a condemnation suit, and 1 site is being cleared by moving upstream, making a total of 22 sites. Weekly meetings are being held to work on remaining problems.

Little Washita River watershed has 22 cleared for construction, 11 sites have only one easement remaining, 4 sites involve Indian tracts of land, and other 11 sites have multiple problems involving many factors and factions.

Maysville Laterals sites are being constructed. There are 5 more sites cleared for construction making a total of 12 sites built or ready to be built. Weekly meetings have been held for more than a year, and progress is slow but a determined group continue work on remaining problems.

#### Progress in Structural Measures

At the end of this twenty-first year of construction, approximately 81% of the planned measures are contracted or constructed, with a total of 910 floodwater retarding structures and 38.1 miles of channel improvement having been contracted or completed within Oklahoma. An additional 38 floodwater retarding structures have been built on the Washita in Texas.

During fiscal year 1970, 30 floodwater retarding structures reached the "contracted or completed" category. Several rock rip-rap jobs were also contracted.

#### Effectiveness of the Project

This is the third year of droughty conditions on Reach I and II segment. The Washita River was dry above Hammon during most of the year. Since the project has been installed, 10,000 acres of land has been restored to former productivity in Reach I. These restored acres were responsible for producing the majority of the crops during these droughty conditions.

There were 4,400 acres of land irrigated from structures during the year. The majority of the sites are being used for recreation. Site 1, Cobb Creek, is still a hot spot for skiing and fishing. Sites 16 and 19, Sugar Creek, are leased for recreation. The land

owner of Site 2, Oak Creek, is raising catfish in cages and the site is also being used for overnight camping. Site 38, Rainy Mountain Creek, is leased to a club for fishing. Also Site 5, Oak Creek (multipurpose site), is now open to the public for fishing.

High intensity rains fell in the last few days of the fiscal year with only minor out-of-bank flows occurring on the Washita River. Some of these rains fell in the area of Bear Creek and Gyp Creek where the planned structures have not been installed. No flood damage was reported during the fiscal year.

Heavy thunderstorms the night of October 7, 1970, resulted in floods of unusual magnitude over most of the area of the following watersheds: Peavine Creek, Cherokee Sandy Creek, Chigley Sandy Creek, Kickapoo Sandy Creek, Rock Creek and Mill Creek.

Rainfall intensities of this storm exceeded the 100-year frequency over much of the area studied and produced emergency spillway flow at 47 of the 90 floodwater retarding structures located in the six watersheds. Spillway depth of flow exceeded 2.0 feet at 22 of the structures with duration of spillway flow near 24 hours in several cases and near 36 hours at one site. Estimated exit channel velocities ranged as high as 14 feet per second. In spite of this severe test, emergency spillways suffered only minor damage.

The most severe flooding occurred in and near the City of Sulphur, Oklahoma. Depth of flooding in the city reached 11 feet and exceeded 7 feet in Platt National Park. Damages in the city and the park exceeded \$660,000. Without the floodwater retarding structures, which regulate flow from 62% of the 40 square miles of drainage area above the city, these damages would have exceeded 1.5 million dollars.

The total estimated damages below existing structures for the six watersheds involved in this study were \$1,246,300. Without present works of improvement, these damages would have been \$2,775,100. This represents a reduction in estimated damages of 55% or conversely the damage would have been 2.2 times greater without present works of improvement. If all presently planned works of improvement had been installed these damages would have totaled \$1,129,000, a total reduction of 59%.









